

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application:

## **LISTING OF CLAIMS:**

Claims 1 to 8. (Canceled).

9. (Currently Amended) A fuel injector for a fuel-injection system of an internal combustion engine, comprising:

a solenoid coil;

a tubular support acting as an inner pole of the solenoid coil; and

a filter element affixed on an outer contour of the tubular support;

wherein the outer contour of the tubular support includes grooves;

wherein the tubular support includes a shoulder on a discharge side of the grooves;

and

wherein the shoulder extends radially outward beyond outer edges of the grooves.

Claim 10. (Canceled).

11. (Currently Amended) The fuel injector as recited in Claim ~~10~~ 9, wherein the grooves are provided in the outer contour of the tubular support by one of machine cutting and with the aid of a form steel.

Claim 12. (Canceled).

13. (Currently Amended) The fuel injector as recited in Claim ~~12~~ 9, wherein the filter element rests against the shoulder.

14. (Currently Amended) The fuel injector as recited in Claim ~~10~~ 9, further comprising:

an extension sleeve surrounding the exterior of the filter element, wherein the extension sleeve has an inner diameter that is slightly smaller than an outer diameter of the filter element, whereby a press-fit between the filter element and the tubular support is achieved by the extension sleeve.

15. (Currently Amended) The fuel injector as recited in Claim ~~42~~ 9, further comprising:

an extension sleeve surrounding the exterior of the filter element, wherein the extension sleeve has an inner diameter that is slightly smaller than an outer diameter of the filter element, whereby a press-fit between the filter element and the tubular support is achieved by the extension sleeve.

16. (Previously Presented) The fuel injector as recited in Claim 13, further comprising:

an extension sleeve surrounding the exterior of the filter element, wherein the extension sleeve has an inner diameter that is slightly smaller than an outer diameter of the filter element, whereby a press-fit between the filter element and the tubular support is achieved by the extension sleeve.

17. (Currently Amended) The fuel injector as recited in Claim ~~40~~ 9, wherein the filter element includes a cup-shaped filter made of a cloth material and a glass fiber plastic extrusion coat.

18. (Previously Presented) The fuel injector as recited in Claim 13, wherein the filter element includes a cup-shaped filter made of a cloth material and a glass fiber plastic extrusion coat.

19. (Previously Presented) The fuel injector as recited in Claim 14, wherein the filter element includes a cup-shaped filter made of a cloth material and a glass fiber plastic extrusion coat.

20. (Previously Presented) The fuel injector as recited in Claim 15, wherein the filter element includes a cup-shaped filter made of a cloth material and a glass fiber plastic extrusion coat.

21. (Previously Presented) The fuel injector as recited in Claim 16, wherein the filter element includes a cup-shaped filter made of a cloth material and a glass fiber plastic extrusion coat.

22. (Currently Amended) A method for installing a fuel injector for a fuel-injection system of an internal combustion engine, the fuel injector having a solenoid coil, a tubular support acting as an inner pole of the solenoid coil, and a filter element affixed on an outer contour of the tubular support, the method comprising the steps of:

- producing the filter element, the filter element including a cup—shaped filter having a cloth material;

- extrusion-coating the filter element with a glass fiber plastic extrusion coat;

- providing grooves in the outer contour of the tubular support, the tubular support including a shoulder on a discharge side of the grooves, and the shoulder extending radially outward beyond outer edges of the grooves;

- mounting the filter element onto the outer contour of the tubular support;

- mounting an extension sleeve on an outer contour of the filter element, an inner diameter of the extension sleeve being slightly smaller than an outer diameter of the filter element; and

- compressing the glass fiber plastic extrusion coat of the filter element into the grooves in the outer contour of the tubular support, using mounting pressure applied by the extension sleeve.